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March 1964

PHOTOGRAPHIC INTERPRETATION REPORT

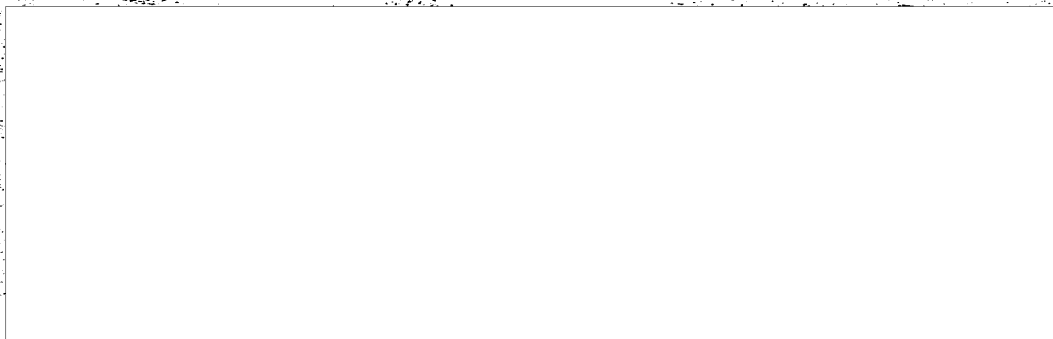
ICBM COMPLEX, KOSTROMA, USSR



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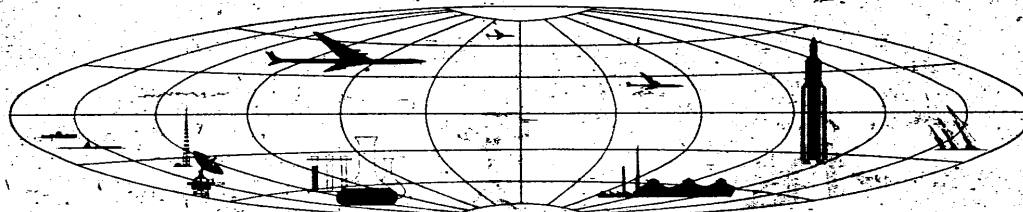


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PHOTOGRAPHIC INTERPRETATION REPORT

ICBM COMPLEX, KOSTROMA, USSR

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| | |
|----------------------------|---------------|
| Launch Site A (TDI Site 1) | 58-02N 41-21E |
| Launch Site B (TDI Site 2) | 58-01N 41-07E |
| Launch Site C (TDI Site 3) | 57-59N 41-09E |
| Launch Site D (TDI Site 4) | 58-05N 41-40E |
| Launch Site E (TDI Site 5) | 57-57N 41-13E |
| Launch Site F (TDI Site 6) | 57-55N 41-09E |
| Launch Site G (TDI Site 7) | 58-06N 41-32E |
| Launch Site H (TDI Site 8) | 58-03N 41-33E |

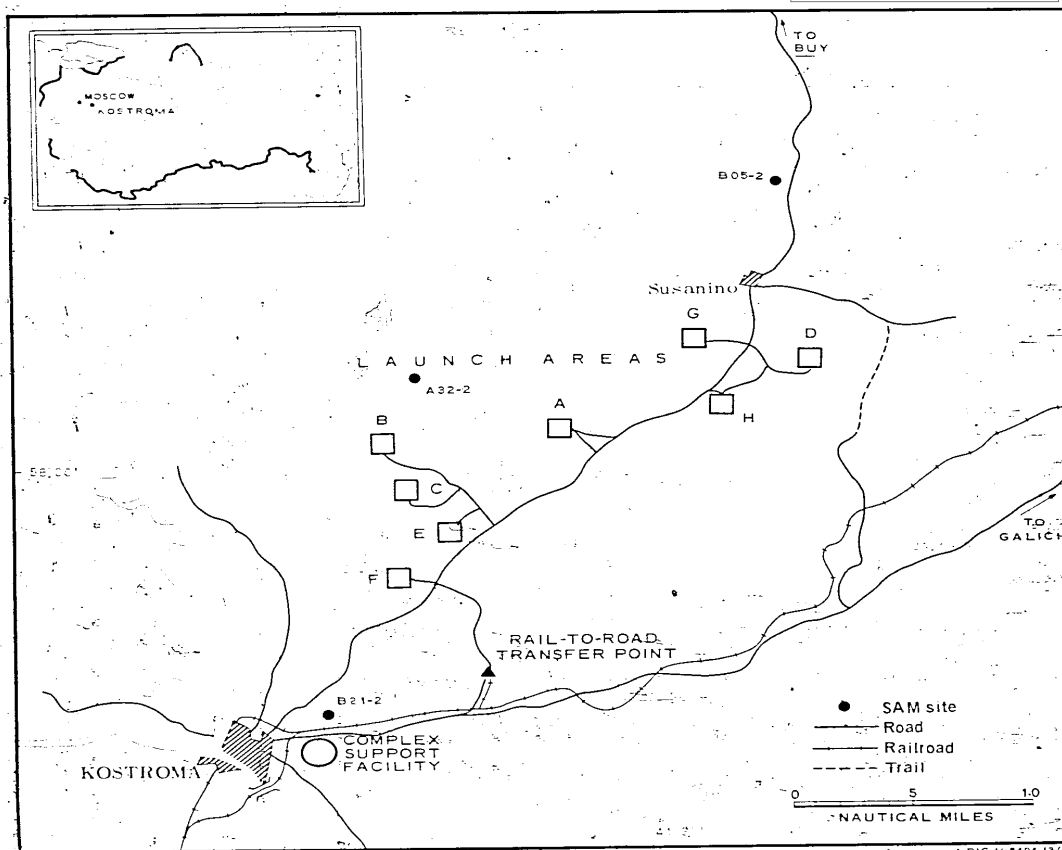


FIGURE 1. LOCATION OF COMPLEX.

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ICBM COMPLEX, KOSTROMA, USSR.

INTRODUCTION

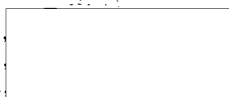
The Kostroma ICBM Complex stretches from the eastern edge of Kostroma to a point 30 nautical miles (nm) northeast of the city in gently rolling, partially forested terrain that is interspersed with agricultural land (Figure 1). It includes a complex support facility, a rail-to-road transfer point, and 7 confirmed and one possible launch areas. Of the 8 launch areas, 4 include completed Type IIB sites (A, B, C, and D). The remaining 4 are under construction, and include 2 Type IID sites (F and G) and 2 Type IIIA sites, one confirmed (E) and one possible (H). All six of the Type II sites are oriented on an azimuth of 295 degrees plus or minus 5 degrees, and the single confirmed hard site (E) is oriented

on an azimuth of 290 degrees plus or minus 5 degrees. The launch areas are served from the Kostroma-Buy highway which is also the complex main road; all the various access roads have characteristic wide-radius turns. Rail service is provided by a branch to the rail-to-road transfer point from the Kostroma-Galich rail line. Power traces are evident within the complex.

There was no evidence of the complex in August 1960 [redacted]. It was identified on photography of July 1961 [redacted] and has been covered by subsequent missions.

Three SA-2 SAM Sites are deployed in the general area of the complex:

Kostroma ICBM Complex SAM Site A32-2
Kostroma ICBM Complex SAM Site B05-2
Kostroma ICBM Complex SAM Site B21-2



COMPLEX SUPPORT FACILITY

The complex support facility is located on the eastern outskirts of Kostroma at 57-46N 41-01E. The facility, which is both road and rail served, encompasses an area approximately 4,500 by 2,600 feet (Figure 2). It consists of a railhead and storage area with an administration/housing area along the southeastern side and a small housing area adjacent to the northwest. There have been no significant changes at the facility since December 1961. 1/

The railhead and storage area contains four long spurs, ranging in length from 3,300 to 3,700 feet, and two short spurs; the long spurs are approximately 500 feet apart. There

are several large warehouse-type buildings and a batch plant with several long conveyers. Extensive open storage is visible along the tracks on the western edge of the area, and no rail-through buildings are apparent. The administration/housing area contains over 25 barracks-type buildings, 4 large administration-type buildings, and many other smaller structures. A storage area and a vehicle/equipment pool just to the northeast are the only evident secured areas. The small housing area on the northwest side of the facility contains 11 small barracks-type buildings.

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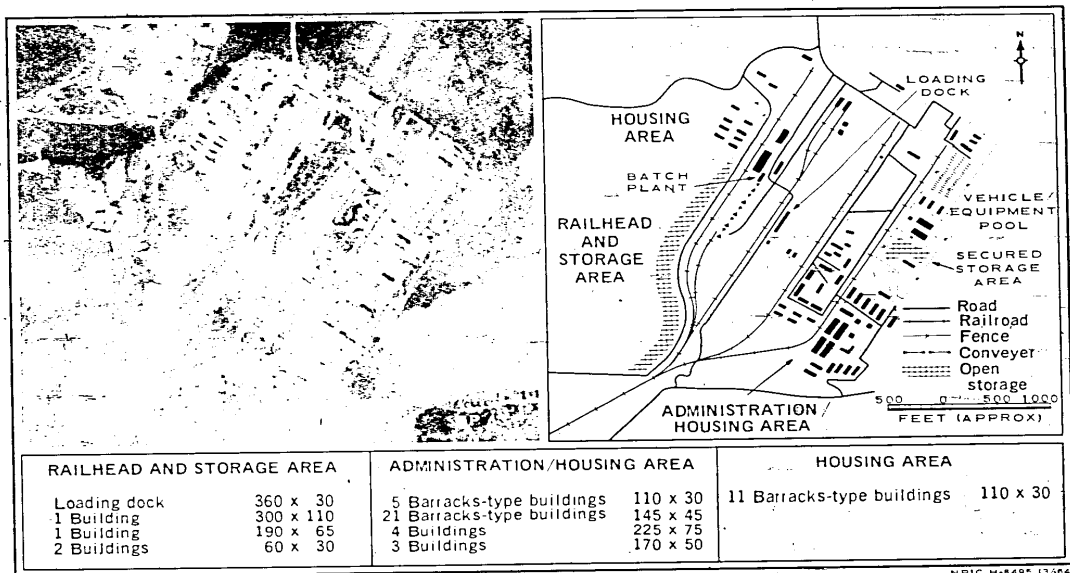


FIGURE 2. COMPLEX SUPPORT FACILITY.

RAIL-TO-ROAD TRANSFER POINT

The rail-to-road transfer point (Figure 3) is a loop type that is situated at 57-51N 41-15E in a wooded area approximately 9.3 nm northeast of the complex support facility. It is served by a branch of the Kostroma-Galich rail line that terminates in three westward-veering spurs, the most northerly of which is at the transfer point. A paved and graded road passes through the facility and extends to join the

complex main road.

An auxiliary support facility is located along the branch line to the south of the transfer point. This area contains approximately 25 large and 23 other small miscellaneous buildings, a vehicle/equipment pool, and two rail spurs which veer to the east and have a warehouse-type building and a batch plant alongside the tracks.

LAUNCH AREA A

Launch Area A consists of a completed Type IIB launch site and a site support facility

(Figure 4). It is in a wooded location approximately 19.5 nm northeast of the complex

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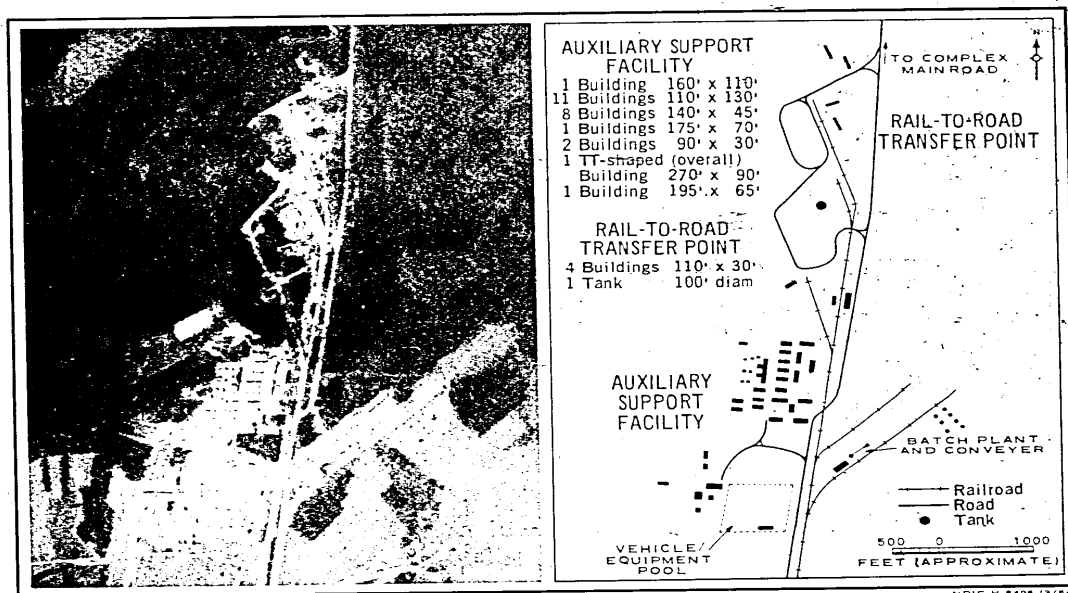


FIGURE 3. RAIL-TO-ROAD TRANSFER POINT AND AUXILIARY SUPPORT FACILITY.

support facility. First seen in July 1961 [redacted] it can be negated on photography of August 1960 [redacted] and was considered to have been complete in April 1962 [redacted]

The launch site is in a clearing and is enclosed by a double security fence. An erector/shelter is apparent on each pad and there is a missile-ready building 500 feet to the rear of each pad, the left one in line with the pad azimuth and the earth-mounded right ready building canted approximately 25 degrees outward. Four buildings are aligned to the left of the center service road which is offset to the right; the northernmost has a probable domelike object on top and the next in line is earth

mounded. [redacted]

The three buildings to the rear were not present when the site was considered complete in April 1962.

The site support facility consists of two groups of buildings. One, an administration/housing section, is approximately 2,000 feet northeast of the launch site and contains approximately 14 buildings, 9 of which are barracks type. The other, a housing section, is about 4,000 feet southeast of the launch site and contains approximately 28 buildings, 21 of which are barracks type.

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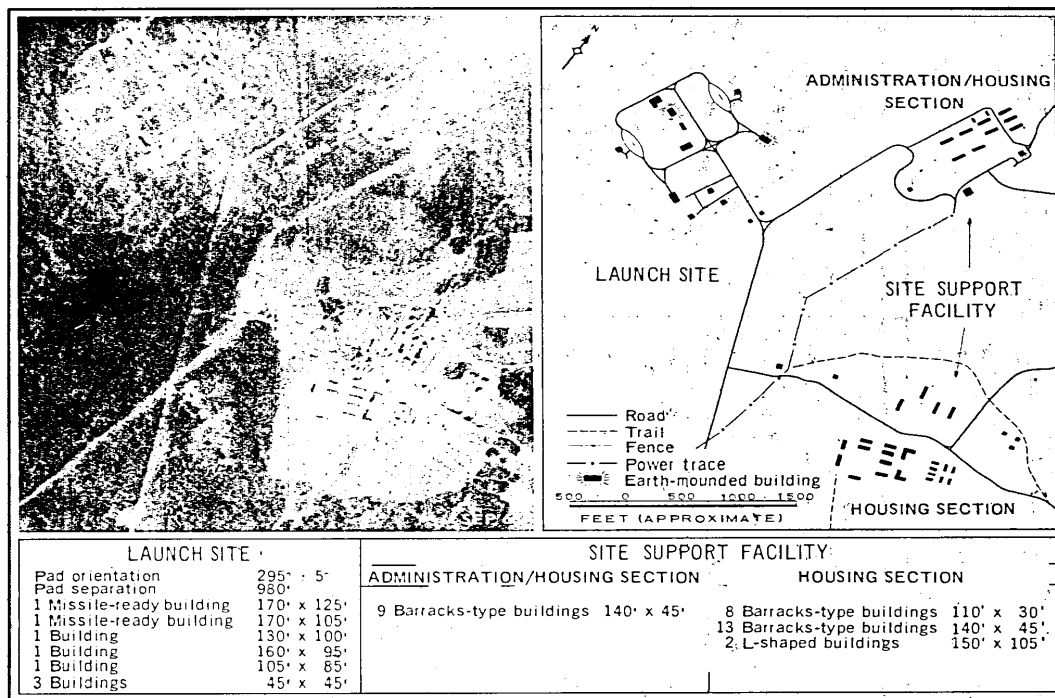


FIGURE 4. LAUNCH AREA A.

LAUNCH AREA B

Launch Area B consists of a completed Type IIB launch site and a site support facility (Figure 5). It is in a wooded location 15.5 nm north-northeast of the complex support facility. First seen in December 1961 [redacted], it can be negated on photography of August 1960 [redacted] and was considered to have been complete in April 1962 [redacted].

The launch site is in a clearing that is enclosed by a double security fence. An erector shelter is apparent on each pad and

there is a missile-ready building approximately 500 feet to the rear of each pad, the right one in line with the pad azimuth and the left canted about 25° degrees inward. Four buildings are aligned to the left of the center service road which is offset to the right; from north to south, the first and last have a probable domelike structure on top and the second in line has been earth mounded. [redacted]

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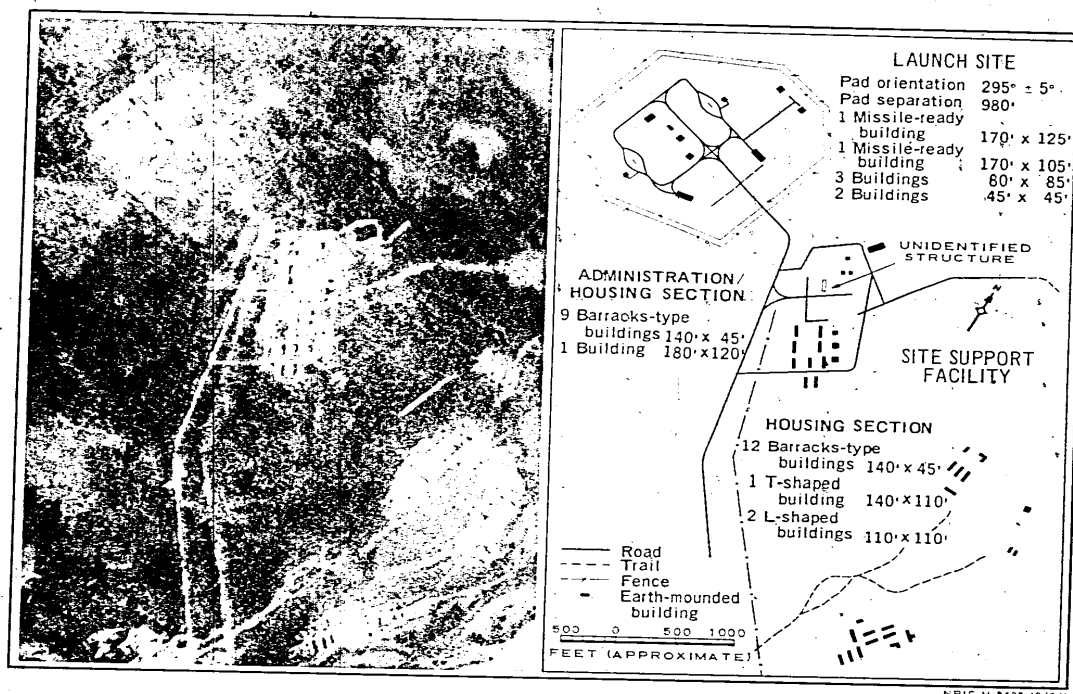


FIGURE 5. LAUNCH AREA B.

The two buildings northeast of the right pad were not present when the site was first considered complete in April 1962.

The site support facility is divided into two groups of buildings. One, an administration housing section, is approximately 2,500 feet

southeast of the launch site and contains at least 16 buildings, 9 of which are of the large barracks type. The other, a housing section, is approximately one nm southeast of the launch site and contains approximately 21 buildings, including 12 barracks type.

LAUNCH AREA C

Launch Area C consists of a completed Type IIB launch site and a site support facility (Figure 6). It is in a wooded location 13.5 nm north-northeast of the complex support facility. The launch area was first seen in December 1961 [redacted] can be negated on photog-

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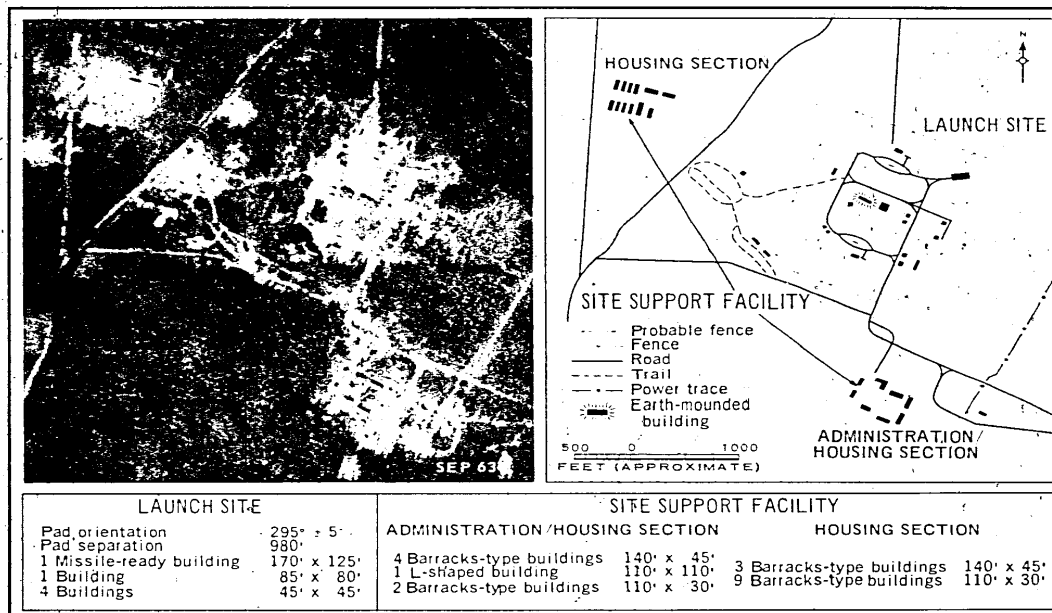


FIGURE 6. LAUNCH AREA C.

raphy of August 1960 [] and was considered to have been complete in June 1963 []

The launch site is in a clearing with a single security fence that is visible on the south and west sides and probably extends to enclose the site. An erector/shelter is visible on each pad. A single missile-ready building is approximately 500 feet behind the right pad and is canted approximately 25° degrees outward. To the rear of the left pad, where a ready building normally would be located, there are three small buildings. To the left of the center service road, which is offset

to the right, there are five buildings, one of which is earth mounded. []

The site support facility consists of two groups of buildings. One, an administration/housing section, is approximately 2,000 feet south-southwest of the launch site and contains 9 buildings, including 6 of the barracks type. The other, a housing section, is approximately 2,500 feet northwest of the launch site and contains approximately 12 barracks-type buildings.

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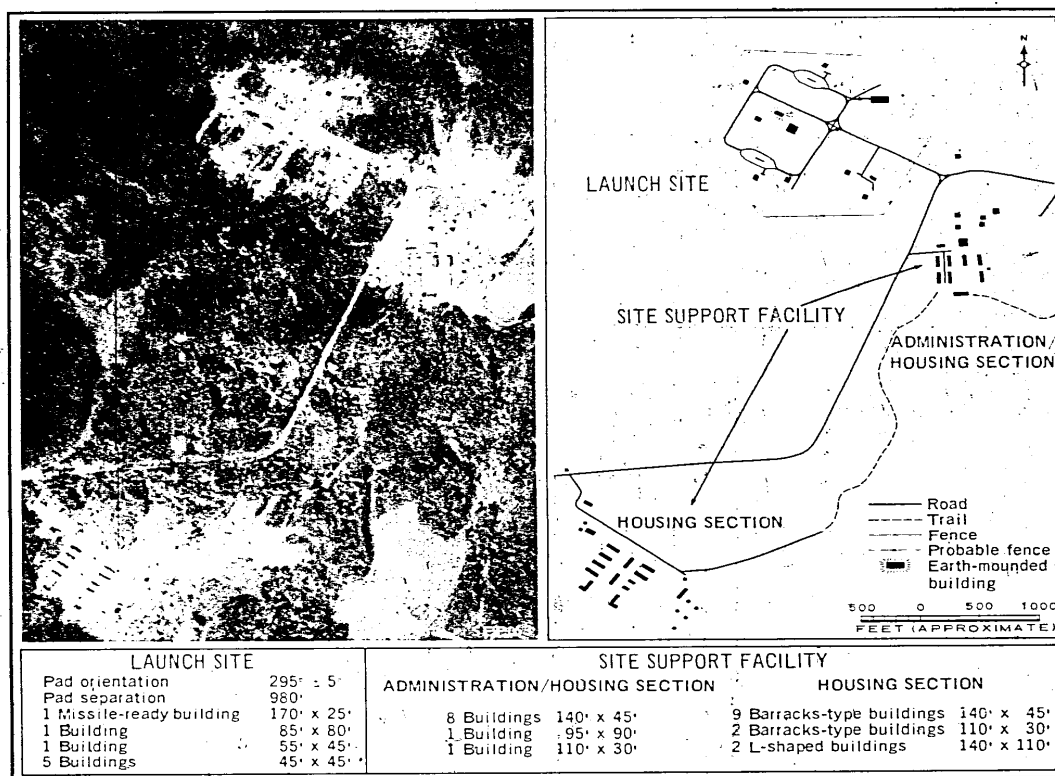


FIGURE 7. LAUNCH AREA D.

LAUNCH AREA D

Launch Area D consists of a completed Type IIB launch site and a site support facility (Figure 7). It is in a wooded location 28.3 nm northeast of the complex support facility. This area was first observed in March 1962. [redacted] can be negated on photography of December 1961 [redacted] and was con-

sidered to have been complete in June 1963 [redacted]

The launch site is in a clearing and security fencing is visible on the south and east sides. An erector/shelter is apparent on each pad and a single missile-ready building is situated approximately 500 feet to the rear of

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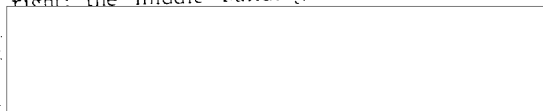
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the right pad, canted approximately 25 degrees outward. Three buildings are to the left of the center service road which is offset to the right; the middle building is earth mounded.



The site support facility consists of two

groups of buildings. One, an administration/housing section, is approximately 2,000 feet southeast of the launch site and contains approximately 17 buildings, 9 of which are barracks type. The other, a housing section, is approximately 4,500 feet south-southwest of the launch site and contains approximately 24 buildings, including 11 barracks type.

LAUNCH AREA E

Launch Area E consists of a Type IIIA launch site in the late stage of construction, a site support facility, and a possible receiving, inspection, and maintenance (RIM) facility under construction (Figure 8). The area is in a wooded location 12.8 nm northeast of the complex support facility. It was first seen in March 1962 and can be negated on photography of December 1961.

The launch site is situated in a clearing with a single security fence that is visible on the north and east sides and probably extends to enclose the site. There are 3 silos, a control bunker, 2 equipment bunkers, and 5 miscellaneous buildings. Also, three unidentified objects are positioned diagonally and side by side at the southwest end of the site.

The site support facility is divided into

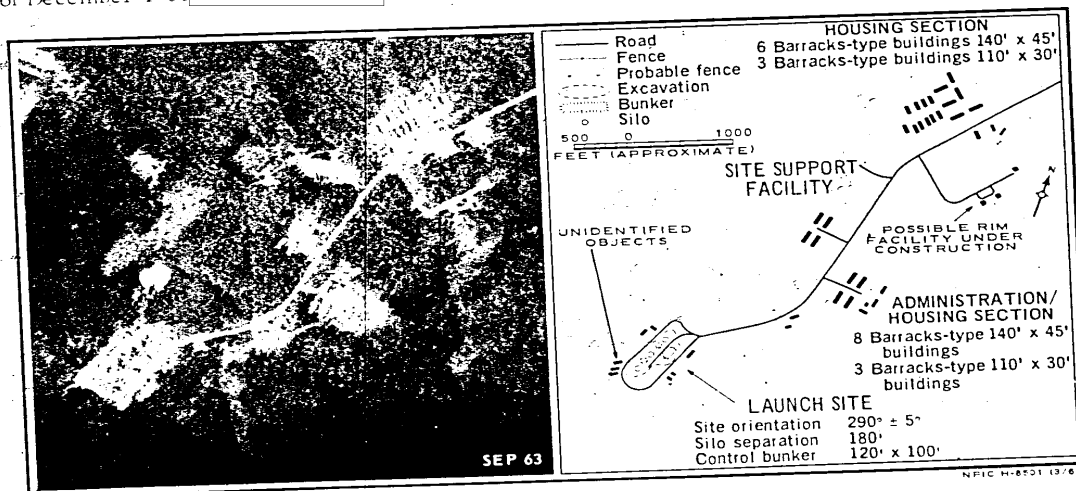


FIGURE 8. LAUNCH AREA E.

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three groups of buildings. Two of these groups are on opposite sides of the access road about 2,000 feet northeast of the launch site and constitute an administration/housing section. Eleven barracks-type and three smaller buildings are in the section. The third group, a housing section, is approximately 3,500 feet northeast of the launch site and includes 16 barracks type and several smaller buildings.

The possible RIM facility is situated along an L-shaped road which extends south and east from the access road approximately 3,000 feet northeast of the launch site. This road has a single structure at its terminus and two others midway along the lower leg of the L. The facility is in an early stage of construction and no security measures are visible.

LAUNCH AREA F

Launch Area F consists of a Type III launch site in the late stage of construction and a site support facility (Figure 9). It is in a wooded location 10.2 nm northeast of the complex support facility. The area was first seen in December 1962 [] and can

be negated on photography of April 1962 []

The launch site is situated in a clearing but no security measures are evident. One missile-ready building is present, situated 500 feet behind the right launch pad and canted approximately

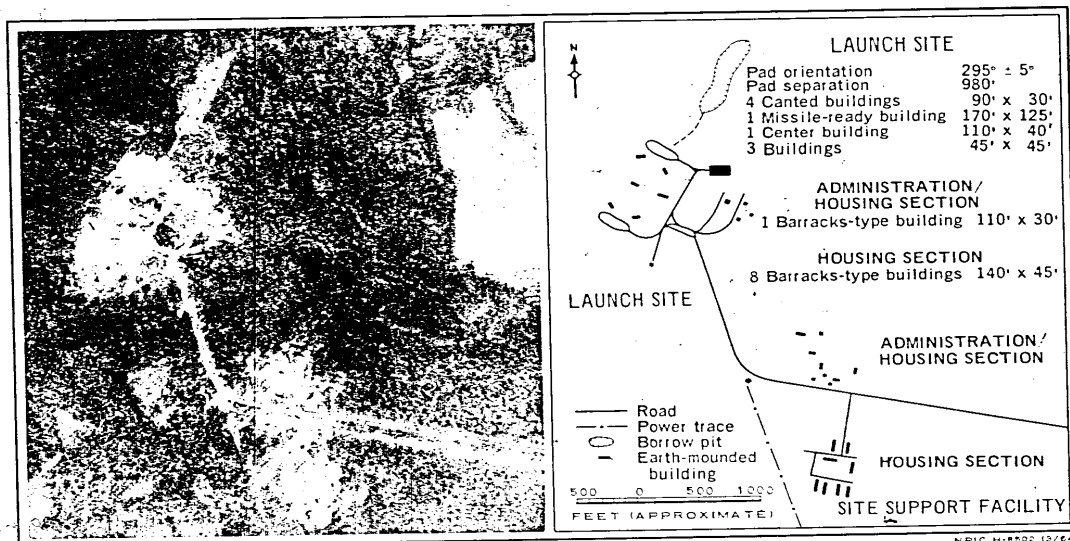


FIGURE 9. LAUNCH AREA F.

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25 degrees outward. Two canted buildings are inboard of each launch pad and in line at the center of the site are two other buildings, one of which is earth mounded.

The site support facility is approximately 3,000 feet southeast of the launch site and is made up of an administration housing section having about 10 buildings and a housing section of 8 barracks-type buildings.

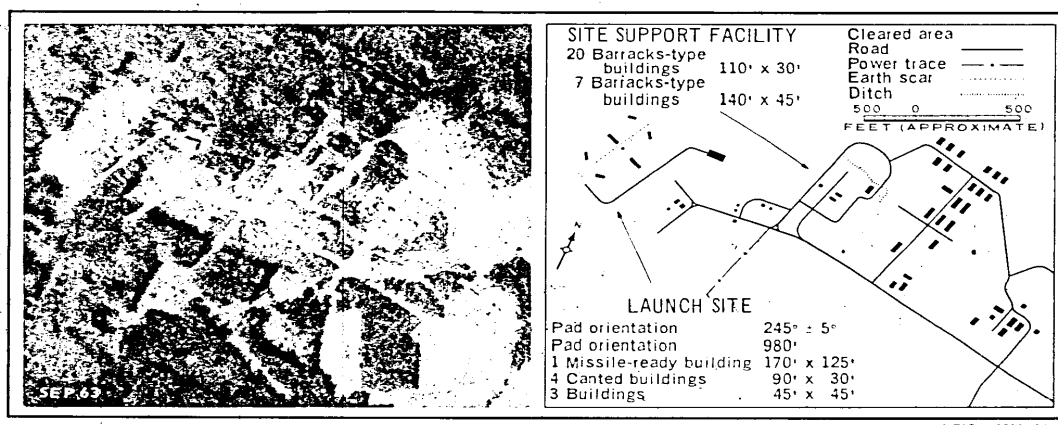
LAUNCH AREA G

Launch Area G consists of a Type IID launch site in the midstage of construction and a site support facility (Figure 10). It is in a wooded location 26.4 nm northeast of the complex support facility. The area was first seen in June 1963 and can be negated on photography of July 1962.

the right launch pad clearing. This building is canted approximately 25 degrees outward from the long axis of the pad. Three buildings are in line down the center of the site and two canted buildings are inboard of each pad clearing.

At the launch site, no launch pads or security measures are evident, although the ground has been cleared and construction activity is apparent. A single missile-ready building is situated approximately 500 feet to the rear of

A site support facility is situated approximately 3,000 feet east of the launch site and contains 27 barracks-type buildings and 13 smaller ones.



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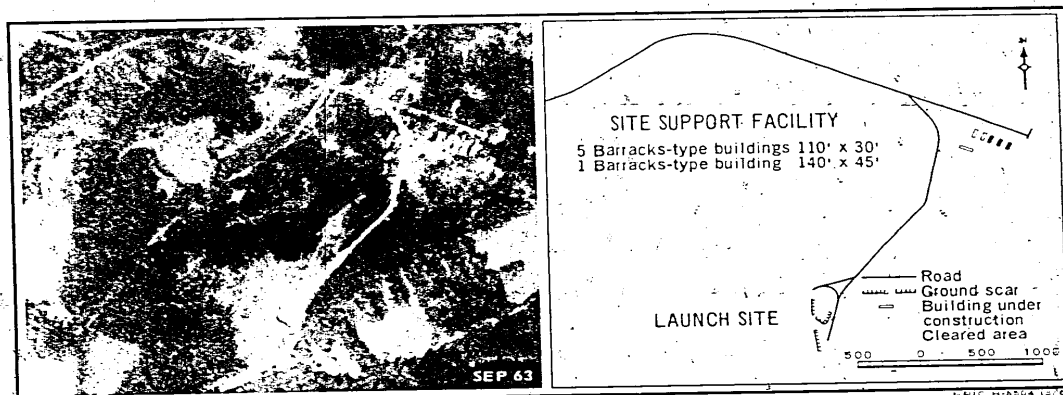


FIGURE 11. LAUNCH AREA H.

LAUNCH AREA H

Launch Area H consists of a newly identified possible Type IIIA launch site in the early stage of construction and a site support facility (Figure 11). It is situated in a wooded area 24.4 nm northeast of the complex support facility. The area was first seen in August 1963 [redacted] and can be negated on photography of June 1963 [redacted]

The launch site is in a cleared area but no security fence and no buildings are evident as yet. However, an irregular and undefined ground scar is visible. The site support facility is approximately 2,000 feet northeast of the launch site and contains 6 barracks-type buildings, 3 of which are complete.

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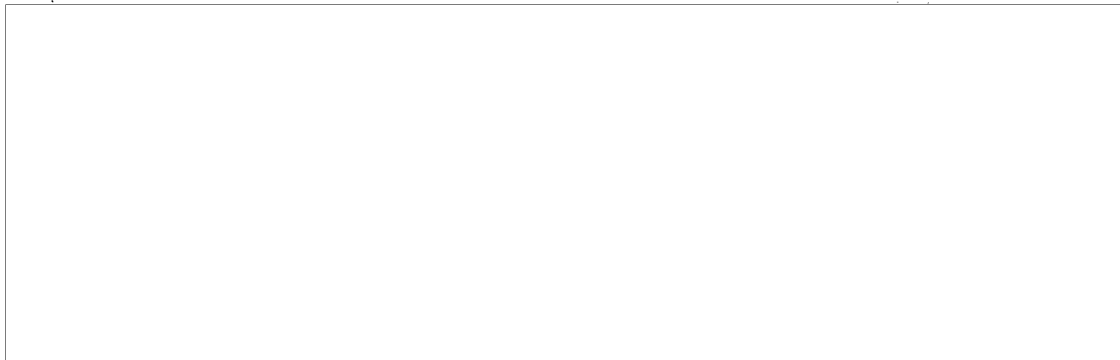
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REFERENCES



MAPS OR CHARTS

ATC. Series 200, Sheet 0154-14L, 2d ed, Dec 61, scale 1:200,000 (SECRET)

DOCUMENT

1. NPIC. R-8 '63, ICBM Launch Complex, Kostroma, USSR, Feb 63 (TOP SECRET CHESS RUFF)

REQUIREMENT

NPIC. PC 806-63 (partial answer)

NPIC PROJECT

J-268 '63 (partial answer)

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